

In re Application of:  
Lee and McPherron  
Application No.: 09/708,693  
Filed: November 7, 2000  
Page 2

PATENT  
Atty Docket No.: JHU1120-15

**Amendments to the Claims**

Please amend claims 1, 11, 19, 22, 26, 29, 32-33, 37 and 40 as indicated in the listing of claims.

Please add new claims 42 and 43 as indicated in the listing of claims.

Please cancel claims 2-4, 20-21, 30, 34-46 and 38 without prejudice or disclaimer.

Claims 5-8, 12-14, 16-18 and 23-25 were previously canceled.

The listing of claims will replace all prior versions, and listings of claims in the application.

**Listing of Claims:**

1. (Currently amended) An isolated polynucleotide encoding a peptide of a promyostatin polypeptide, said peptide having signal peptide activity comprising a promyostatin signal peptide domain corresponding to amino acid residues from about 1 to 20 of full length promyostatin polypeptide and wherein the promyostatin polypeptide is selected from the group consisting of human (SEQ ID NO:2), murine (SEQ ID NO:4), rat (SEQ ID NO:6), chicken (SEQ ID NO:8), baboon (SEQ ID NO:10), bovine (SEQ ID NO:12), porcine (SEQ ID NO:14), ovine (SEQ ID NO:16), turkey (SEQ ID NO:18), and zebrafish (SEQ ID NO:20), and said peptide having signal peptide activity or a polynucleotide complementary thereto to said polynucleotide.

2.-4. (Canceled).

5.-8. (Canceled).

9. (Original) A vector, comprising a polynucleotide of claim 1.

10. (Original) The vector of claim 9, wherein said vector is an expression vector.

In re Application of:  
Lee and McPherron  
Application No.: 09/708,693  
Filed: November 7, 2000  
Page 3

PATENT  
Atty Docket No.: JHU1120-15

11. (Currently amended) ~~A~~ An isolated host cell containing a polynucleotide of claim 1.

12.-14. (Canceled).

15. (Previously presented) The polynucleotide of claim 1, wherein the promyostatin polypeptide is encoded by SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:7, SEQ ID NO:9, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, or SEQ ID NO:19.

16.-18. (Canceled).

19. (Currently amended) An isolated polynucleotide encoding a peptide of a promyostatin polypeptide, said peptide having muscle growth inhibitory activity comprising a promyostatin myostatin domain corresponding to amino acid residues from about 267 or 268 to 374 or 375 of a full length promyostatin polypeptide, and wherein the promyostatin polypeptide is selected from the group consisting of human (SEQ ID NO:2), murine (SEQ ID NO:4, rat (SEQ ID NO:6), chicken (SEQ ID NO:8), baboon (SEQ ID NO:10), bovine (SEQ ID NO:12), porcine (SEQ ID NO:14), ovine (SEQ ID NO:16), turkey (SEQ ID NO:18, and zebrafish (SEQ ID NO:20), and said peptide having muscle growth inhibitory activity, or a polynucleotide complementary thereto to said polynucleotide.

20.-21. (Canceled).

22. (Currently Amended) The polynucleotide of claim 19, wherein the promyostatin myostatin domain corresponding to amino acid residues about 267 to 374 of the promyostatin polypeptide selected from the group consisting of ~~comprises:~~

~~amino acid residues about 267 to 374 as set forth in SEQ ID NO:2;~~  
~~amino acid residues about 268 to 375 as set forth in SEQ ID NO:4;~~  
~~amino acid residues about 268 to 375 as set forth in SEQ ID NO:6;~~  
~~amino acid residues about 267 to 374 as set forth in SEQ ID NO:8;~~  
~~amino acid residues about 267 to 374 as set forth in SEQ ID NO:10;~~  
~~amino acid residues about 267 to 374 as set forth in SEQ ID NO:12;~~  
~~amino acid residues about 267 to 374 as set forth in SEQ ID NO:14;~~  
~~amino acid residues about 267 to 374 as set forth in SEQ ID NO:16~~  
~~amino acid residues about 267 to 374 as set forth in SEQ ID NO:18; or~~ and  
~~amino acid residues about 267 to 374 as set forth in SEQ ID NO:20.~~

23.-25. (Canceled).

26. (Currently Amended) An isolated polynucleotide encoding a promyostatin myostatin domain, or a polynucleotide complementary to said polynucleotide, said myostatin domain having muscle growth inhibitory activity, and said myostatin domain comprising:

amino acid residues from about 49 to 157 of SEQ ID NO:27; or  
amino acid residues from about 28 to 136 of SEQ ID NO:29.

27. (Original) A vector, comprising a polynucleotide of claim 19.

28. (Original) The vector of claim 27, wherein said vector is a viral vector.

29. (Currently amended) A An isolated host cell containing the vector of claim 27.

30. (Canceled).

31. (Previously presented) The polynucleotide of claim 19, wherein the promyostatin polypeptide is encoded by SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:7, SEQ ID NO:9, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, or SEQ ID NO:19.

32. (Currently amended) ~~A~~ An isolated host cell, which contains the polynucleotide of claim 19.

33. (Currently amended) An isolated polynucleotide encoding a peptide of a promyostatin polypeptide, said peptide having myostatin binding activity, comprising a promyostatin prodomain corresponding to amino acid residues from about 20 to 262 or 263 of a full length promyostatin polypeptide, and wherein the promyostatin polypeptide is selected from the group consisting of human (SEQ ID NO:2), murine (SEQ ID NO:4, rat (SEQ ID NO:6), chicken (SEQ ID NO:8), baboon (SEQ ID NO:10), bovine (SEQ ID NO:12), porcine (SEQ ID NO:14), ovine (SEQ ID NO:16), turkey (SEQ ID NO:18, and zebrafish (SEQ ID NO:20), and ~~said peptide having myostatin binding activity~~, or a polynucleotide complementary thereto ~~to~~ said polynucleotide.

34.-36. (Canceled) .

37. (Currently Amended) The polynucleotide of claim 33, wherein the promyostatin prodomain corresponding to amino acid residues from about 20 to 262 of the promyostatin polypeptide selected from the group consisting ofcomprises:

~~amino acid residues about 20 to 263 as set forth in SEQ ID NO:4;~~  
~~amino acid residues about 20 to 262 as set forth in SEQ ID NO:2;~~  
~~amino acid residues about 20 to 262 as set forth in SEQ ID NO:10;~~  
~~amino acid residues about 20 to 262 as set forth in SEQ ID NO:12;~~  
~~amino acid residues about 20 to 262 as set forth in SEQ ID NO:8;~~  
~~amino acid residues about 20 to 263 as set forth in SEQ ID NO:6;~~  
~~amino acid residues about 20 to 262 as set forth in SEQ ID NO:18;~~  
~~amino acid residues about 20 to 262 as set forth in SEQ ID NO:14;~~  
~~amino acid residues about 20 to 262 as set forth in SEQ ID NO:16; or and~~  
~~amino acid residues about 20 to 262 as set forth in SEQ ID NO:20.~~

38. (Canceled).

39. (Previously presented) A vector, comprising the polynucleotide of claim 33.

40. (Currently amended) A An isolated host cell, which contains the polynucleotide of claim 33.

41. (Previously presented) An isolated polynucleotide, comprising SEQ ID NO:26 or SEQ ID NO:28.

42. (New) The polynucleotide of claim 19, wherein the promyostatin myostatin domain corresponding to amino acid residues from about 268 to 375 as set forth in SEQ ID NO:4 or SEQ ID NO:6.

In re Application of:  
Lee and McPherron  
Application No.: 09/708,693  
Filed: November 7, 2000  
Page 7

PATENT  
Atty Docket No.: JHU1120-15

43. (New) The polynucleotide of claim 19, wherein the promyostatin myostatin domain corresponding to amino acid residues from about 20 to 263 as set forth in SEQ ID NO:4 or SEQ ID NO:6.